CLAIMS

THE EMBODIMENTS OF THE PRESENT INVENTION, IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED, ARE DEFINED AS FOLLOWS:

1. *(original)* An elongated vehicle snow ski for use on a snow vehicle, said ski comprising:

opposite top and bottom surfaces;

opposite first and second sides;

opposite front and rear ends, said ski defining a longitudinal axis extending between said front and rear ends;

a pivot joint member attached to said top surface for pivotally attaching said ski to a snowmobile for allowing pivotal displacement of said ski about a transversal axis extending between said first and second sides and intersecting said longitudinal axis, said ski further being pivotable about a steering axis that extends transversely to and that intersects said longitudinal and transversal axes;

a pair of spaced-apart, elongated, longitudinally-oriented lateral keels integrally projecting from said bottom surface;

an elongated, longitudinally-oriented central keel integrally projecting from said bottom surface, said central keel being longitudinally offset relative to said lateral keels and being located between said pair of lateral keels along said transversal axis;

wherein said ski is movable between a straight line position in which a ground plane that intersects a lowermost surface of said lateral and central keels is defined, and a turn-carving position in which said ski is pivoted about its steering, longitudinal and transversal axes relative to said straight line position and is inclined laterally so that only said central keel and a single one of said pair of lateral keels intersect said ground plane and the other one of said lateral keels is raised above said ground

plane, said ski bottom surface defining a ground clearance in the vicinity of said central keel allowing said ski bottom surface to remain spaced from said ground plane in said turn-carving position of said ski.

2. *(original)* A vehicle snow ski as defined in claim 1, wherein said lateral keels are located intermediate said transversal axis and said ski front end and said central keel is located intermediate said transversal axis and said ski rear end.

3. *(original)* A vehicle snow ski as defined in claim 1, wherein said ski bottom surface is generally concave and defines a first snow channel between said pair of lateral keels, said first snow channel forking into a second snow channel between said central keel and said first side and a third snow channel between said central keel and said second side, said first, second and third snow channels being destined to channel snow therein during sliding engagement of said ski over a snow-covered terrain.

4. *(original)* A vehicle snow ski as defined in claim 1, wherein said ground clearance includes depressions formed in said ski bottom surface.

5. *(original)* A vehicle snow ski as defined in claim 4, wherein said ski comprises a pair of said depressions located along said ski first and second sides and longitudinally adjacent said central keel.

6. *(original)* A vehicle snow ski as defined in claim 4, wherein said depressions comprise a rearwardly upward inclination of said ski bottom surface.

7. *(original)* A snow vehicle destined to move over an underlying ground surface, comprising a main body, drive means carried by said main body and destined to set said snow vehicle in motion over the ground surface, a selectively controllable steering system carried by said main body comprising a steering pivot member pivotable about a steering axis, and an elongated snow ski pivotally attached to said steering axis of said steering system, said snow ski comprising:

- opposite top and bottom surfaces;
- opposite first and second sides;
- opposite front and rear ends, said ski defining a longitudinal axis extending between said front and rear ends;
- a transverse pivot joint member attached to said top surface and pivotally connected to said steering pivot member of said steering system, said transverse pivot joint member allowing pivotal displacement of said ski about a transversal axis extending between said first and second sides and extending transversely to and intersecting said longitudinal and steering axes;
- a pair of spaced-apart, elongated, longitudinally-oriented lateral keels integrally projecting from said bottom surface;
- an elongated, longitudinally-oriented central keel integrally projecting from said bottom surface, said central keel being longitudinally offset relative to said lateral keels and being located between said pair of lateral keels along said transversal axis;

wherein said ski is movable between a straight line position in which a ground plane that intersects a lowermost surface of said lateral and central keels is defined, with said steering axis forming an acute angle relative to said ground plane, and a turn-carving position in which said ski is pivoted about its steering, longitudinal and transversal axes relative to said straight line position and is inclined laterally so that only said central keel and a single one of said pair of lateral keels intersect

said ground plane and the other one of said lateral keels is raised above said ground plane, said ski bottom surface defining a ground clearance in the vicinity of said central keel allowing said ski bottom surface to remain spaced from said ground plane in said turn-carving position of said ski.

8. *(original)* A snow vehicle as defined in claim 7, wherein said lateral keels are located intermediate said transversal axis and said ski front end and said central keel is located intermediate said transversal axis and said ski rear end.

9. *(original)* A snow vehicle as defined in claim 7, wherein said ski bottom surface is generally concave and defines a first snow channel between said pair of lateral keels, said first snow channel forking into a second snow channel between said central keel and said first side and a third snow channel between said central keel and said second side, said first, second and third snow channels being destined to channel snow therein during sliding engagement of said ski over a snow-covered terrain.

10. *(original)* A vehicle snow ski as defined in claim 7, wherein said ground clearance includes depressions formed in said ski bottom surface.

11. *(original)* A snow vehicle as defined in claim 10, wherein said ski comprises a pair of said depressions located along said ski first and second sides and longitudinally adjacent said central keel.

12. *(original)* A snow vehicle as defined in claim 11, wherein said ski further comprises an additional depression in the form of a rearwardly upward inclination of said ski bottom surface near said ski rear end.

13. *(original)* A snow vehicle as defined in claim 7, wherein said steering system comprises a second steering pivot member pivotable about a second steering axis in addition to the first-named said steering pivot member pivotable about the first-named steering axis, and a second elongated snow ski pivotally attached to said second steering axis in addition to said first-named snow ski being attached to said first-named steering axis, said first-named and second snow skis forming a pair of snow skis located on one side and the other of said snow vehicle and pivotally attached to said steering system for interdependent pivotal displacement of said snow-skis, said second snow ski comprising:

- opposite top and bottom surfaces;
- opposite first and second sides;
- opposite front and rear ends, said ski defining a longitudinal axis extending between said front and rear ends;
- a transverse pivot joint member attached to said top surface and pivotally connected to said second steering pivot member of said steering system, said transverse pivot joint member allowing pivotal displacement of said second snow ski about a transversal axis extending between said first and second sides and extending transversely to and intersecting said longitudinal axis and said second steering axis;
- a pair of spaced-apart, elongated, longitudinally-oriented lateral keels integrally projecting from said bottom surface;

- an elongated, longitudinally-oriented central keel integrally projecting from said bottom surface, said central keel being longitudinally offset relative to said lateral keels and being located between said pair of lateral keels along said transversal axis;

wherein said second snow ski is movable between a straight line position in which a ground plane that intersects a lowermost surface of said lateral and central keels is defined, and a turn-carving position in which said second snow ski is pivoted about said second snow ski steering, longitudinal and transversal axes relative to said straight line position and is inclined laterally so that only said central keel and a single one of said pair of lateral keels intersect said ground plane and the other one of said lateral keels is raised above said ground plane, said ski bottom surface defining a ground clearance in the vicinity of said central keel allowing said ski bottom surface to remain spaced from said ground plane in said turn-carving position of said ski.

14. *(original)* A snow vehicle as defined in claim 13, wherein said first-named and second steering pivot members are inclined rearwardly upwardly from said transverse pivot joint members of said first-named ski and said second ski, respectively, towards said snow vehicle main body.

15. *(original)* A snow vehicle as defined in claim 14, wherein said first-named and second steering pivot members are further inclined inwardly upwardly from said transverse pivot joint members of said first-named ski and said second ski, respectively, towards said snow vehicle main body.

16. *(original)* An elongated snow ski for use on a snow vehicle and destined to glide on and carve a ground surface, said ski being able to take a straight-moving position and a turn-carving position, said ski comprising:

- opposite front and rear ends;

- a ski sole having two lateral edges extending between said front and rear ends;

- a longitudinal axis extending between said front and rear ends, and a transverse axis extending transversely across said lateral edges, perpendicularly to said longitudinal axis;

- first, second and third elongated keels fixedly projecting from said ski sole, said first and second keels being in facing register with each other, and off-centered on said ski sole with respect to said transverse axis, said third keel being intermediate to said first and second keels with respect to said transversal axis, and said third keel being substantially longitudinally offset relative to said first and second keels with reference to said longitudinal axis;

- a ground clearance made in said ski sole at the vicinity of said third keel;

wherein said first, second and third keels are destined to carve the ground surface when said ski is in said straight-moving position, and wherein, when said ski is driven and is set in said turn-carving position, only a selected one of said first and second keels and said third keel are destined to carve the ground surface in order for said ski to exhibit a self-steering behavior.

17. *(original)* A vehicle snow ski as defined in claim 16, wherein said ground clearance includes depressions formed in said ski sole.

18. *(currently amended)* A snow ski according to claim ~~14~~ 17, wherein said two said depressions are formed along said lateral edges, said depressions forming a constriction in said ski sole.

19. *(new)* A method for steering an elongated snow ski in motion, said ski comprising opposite top and bottom surfaces, opposite first and second sides, opposite front and rear ends, said ski defining a longitudinal axis extending between said front and rear ends, and defining a transversal

axis extending between said first and second sides and intersecting said longitudinal axis, said ski further comprising a pair of spaced-apart, elongated, longitudinally-oriented lateral keels integrally projecting from said bottom surface, and an elongated, longitudinally-oriented central keel integrally projecting from said bottom surface, and being longitudinally offset relative to said lateral keels and located between said pair of lateral keels along said transversal axis, said ski bottom surface defining a ground clearance in the vicinity of said central keel, said method comprising the steps of:

(a) initiating the pivoting of said ski about a steering axis extending transversely to and intersecting said longitudinal and transversal axes, in order to initiate a turn; and

(b) forcing said ski to move from a straight line position in which a ground plane that intersects a lowermost surface of said lateral and central keels is defined, to a tilted turn-carving position in which said ski is pivoted about its steering, longitudinal and transversal axes relative to said straight line position and is inclined laterally so that only said central keel and a single one of said pair of lateral keels intersect said ground plane and the other one of said lateral keels is raised above said ground plane, said ground clearance allowing said ski bottom surface to remain spaced from said ground plane in said turn-carving position of said ski;

wherein said ski is forced to be self-steered in the direction of the turn.